Fuels Workshop on Regulatory and Non-Regulatory Fuels Activities for 2007

January 26, 2007

California Environmental Protection Agency

Air Resources Board

Agenda

- Introductions and Schedule
- Discussions of proposed amendments
  - Refinements to CaRFG3 Predictive Model
  - CaRFG3 limits
  - Alternative Emissions Reduction Plan
  - Sulfur offset mechanism
  - Denaturant levels
  - Other
- Presentations by Others
- Open Discussions
- Closing Remarks

Future 2007 Workshop

- Staff proposes to have another workshop either in late February or early March.
- Please contact staff regarding scheduling conflicts

Discussion of Draft Proposed Amendments

Proposed Refinement to CaRFG3 Predictive Model

- Staff is refining the permeation emissions inventory weighting factors
  - Reduce excess ozone forming potential from about 3.04 to about 2.62
- Staff is updating the Tech 5 CO model to include a Tech 5/oxygen term.
  - More CO credit as oxygen goes up
- Still investigating issues with T50/T90 HC curves at low temperature levels

Draft Proposed CaRFG3 Specifications

- Staff proposes to change the RVP limit when the evaporative emissions portion of the CaRFG3 Predictive Model is used from 6.90 psi to 7.00 psi.
  - For non-oxygenated gasoline the limit will remain 6.9 to offset any increase in emissions due to commingling.
- Staff proposes to reduce the Sulfur cap limit from 30 ppmw to 20 ppmw.

Alternative Emissions Reduction Plan

- Staff is proposing to add provision to allow for the use of Alternative Emissions Reduction Plans (AERPs).
- An AERP would allow a refiner the option of seeking emission reductions from other sources while they are making the refinery modification necessary to produce fully complying California gasoline.
  - AERPs would only apply to those emissions associated with offsetting permeation.
  - The refiner would still have to at least comply with the non-permeation portion of the Predictive Model.
  - No AERP may last for more than ??? years.

Alternative Emissions Reduction Plan Application

- The AERP would require a refiner to submit an application that would describe:
  - why the refiner needs relief
  - how the refiner intended to make up any excess emissions
    - emissions must be from combustion sources
    - emissions must be in the same region as refiner
  - how and when the refiner intends to come into compliance
  - what record keeping process will be put into place

Alternative Emissions Reduction Plan Process

- The Executive Officer would have 15 days to respond to the applicant regarding the completeness of application.
- The Executive Officer would make the application available to the public for a 30-day public comment period.
- Within 30 days after the first public comment period ends, the Executive Officer shall notify the applicant and all interested parties of ARB's proposed approval or disapproval.
- The Executive Officer's decision will be made available for public comment for at least 15 days.
- Within 15 days after the second public comment period ends, the Executive Officer shall take final action

Sulfur Offset Mechanism

- Staff proposes adding a provision that would allow for emissions offsetting when a refiner has determined that a batch of gasoline can not be sold due to unintentionally high sulfur content
- The refiner intending to use this flexibility must demonstrate that the batch would have complied with a lower sulfur level.

Sulfur Offset Mechanism

- A refiner would report to the Enforcement Division that it intends to use the proposed flexibility.
- The refiner would report the applicable alternative formulation, the number of gallons, and the percent increase in emissions given by the Predictive Model.
  - Hydrocarbons (ozone-forming potential)
  - Oxides of nitrogen
  - Potency-weight toxics
- The refiner would then have 90 days to offset the increase in emissions with changes in fuel properties.

Sulfur Offset Mechanism

- Once offset, the emissions offsetting mechanism would be terminated
- Generated credits can not be banked.
- Any refiner using the offsetting mechanism must report batch ID, release date, volume, formulation limits, and emissions for each batch reported under the offsetting mechanism.

Denatured Ethanol

- Staff proposes to change the allowable levels of denaturant in ethanol from 4.76 percent to 5.00 percent to be consistent with recent changes in ASTM specification

Other Items

Presentations by Others

Open Discussions

Closing Remarks